has already become a routine method of prophylaxis in postoperative and bedridden patients.

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Delayed Effects of Poliomyelitis

Most physicians have thought of poliomyelitis as a relatively static disease that stabilizes after the initial febrile stage of paralysis. That opinion was shared by their patients, who found that after months or years of diligent exercise they had increased strength so that they were able to discard braces or walk after being confined to wheelchairs. Now, 30 and 40 years after the polio epidemics, increasing numbers of polio survivors are finding themselves unable to perform selfcare tasks or to do the work that they had been doing for years. To polio survivors who believed their condition to be stable, these unexpected limitations are confusing and distressing.

In the past 18 months we have seen 35 polio survivors whose common symptoms were fatigue, pain, decreasing strength or loss of function. Ages ranged between 30 and 84 years. A decreased ability to perform self-care tasks or to ambulate was frequently associated with pain due to degenerative arthritis secondary to muscle imbalance. The joints commonly involved were shoulder (15), knee (8), hip (5), ankle/ foot (4) and wrist (2). Other causes of pain and disability included carpal tunnel syndrome (6), tension headache (5), fibrositis syndrome (3), bursitis/tendinitis (3) and thoracic outlet syndrome (1). All of the patients had scoliosis and many had back pain because of degenerative disc disease (15), spondylosis (8), sacroiliac joint pain (7) and lumbar spinal cord stenosis (3). Though unaccompanied by pain, increasing joint laxity and muscular contracture accounted for increasing disability in 23 patients. Fatigue was a frequent complaint (26) unexplained by anemia, electrolyte disturbance or hormonal dysfunction.

Perhaps most frightening to some polio survivors is the gradual or sometimes sudden onset of progressive weakness (20). In some cases the weakness was explained by radiculopathy (4), lumbar stenosis (3), compression neuropathy (7) or brachial plexitis (1). In these cases the weakness was accompanied by pain, numbness or other appropriate symptoms and signs. In others (5) the weakness was not associated with pain or any other symptoms except fasciculation or a sense of impeding cramp. The weakness was limited to muscle groups previously weakened by poliomyelitis. Alter and other authors have described late progression of weakness in postpolio patients though the cause or mechanism is unknown. Wiechers and Hubbell have studied postpolio patients with single-fiber electromyography, with findings consistent with defective neuromuscular transmission in reinnervated motor units.

Progressive resistive or strengthening exercises have not been helpful in cases of late progressive weakness. In fact, patients have been cautioned to avoid excessive or exhausting exercise. Swimming remains the best form of exercise for the conditioning effect while unloading painful or arthritic joints. Regardless of the cause of decreasing function, patients are encouraged to practice joint and energy conservation in their activities of daily living and in their work situations.

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Sexuality and Disability

IN THE PAST, physically disabled persons were often seen as asexual—without sexual needs, desires or capabilities. Professionals avoided dealing with sexual dysfunction due to lack of training, personal discomfort and a feeling of futility about therapeutic attempts.

This negative stereotype is difficult to sustain in view of the growing literature and research on the subject. For example, we know from the studies of Bors and Comarr that 96% of men who are quadriplegic from cervical spinal cord injury are capable of having an erection and that more than 72% of these men can have intercourse. A recent study of stroke survivors indicates that 73% of the women and 88% of the men retain sexual desire following their disability, and 46% of the men retain the ability to achieve erection.

Today when a person suffers paralysis, amputation, arthritis, cardiopulmonary disease or other illness, modern sex education, counseling and therapy techniques are integrated into the rehabilitation plan to develop sexual capacities to the fullest possible extent.

The goal of sex education is to impart accurate information to all patients who wish to know about sexuality and the effects of disability. Classes, books and movies can be effective supplements to teaching positioning (arthritis, back pain, stroke), the management of incontinence (paraplegia, quadriplegia, ostomy), energy cost of intercourse (cardiopulmonary disease) and side effects of drugs (hypertension, multiple sclerosis).

Sexual counseling is additionally used for those with specific sexual conflicts or needs. Counseling may help with body image concerns (mastectomy, amputation, burns), to decrease performance anxiety, to dispel myths, to broaden attitudes regarding sexual options and to improve ability to communicate effectively about sexual issues. Social skills training is especially helpful for the congenitally disabled.

Sex therapy is needed by the relatively few disabled persons whose problems are not resolved by education and counseling. An intensive individualized program includes sensate-focus exercises most commonly for the treatment of erectile dysfunction, premature ejaculation or anorgasmia. It can also be used as a therapeutic trial